

List of Plants

FERULIC-ACID

Chemid

FERULICACID

Dosage

LD50=837-895 (ivn mus) Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

LD50=416 (ivn mus) Ozaki, Y. and Ma, J-P. 1989. Inhibitory Effects of Tetramethylpyrazine and Ferulic Acid on Spontaneous Movement of Rat Uterus in Situ. Chem. Pharm. Bull. 38(6): 1620-1623, 1990.

LDlo=1,200 (par mus)

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Plant	Plant Part	Low PPM	High PPM	StdDev	*Reference
Achillea millefolium	Plant	--	--		Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
Actaea cimicifuga	Rhizome	--	--		*
Actaea dahurica	Rhizome	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
Agrimonia eupatoria	Plant	--	--		*
Ajuga iva	Shoot	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Ajuga iva	Plant	--	1000.0	0.84	Jim Duke's personal files.
Allium cepa	Bulb	--	0.5	-1.0	*
Allium schoenoprasum	Leaf	--	0.5	-1.08	*
Allium ampeloprasum	Plant	--	--		*
Allium cepa	Root	--	--		Das, V. S. R., Rao, J. V. S. 1964. Phenolic Acids of Onion Plant. Curr. Sci., 33(15): 471-472.
Allium sativum var. sativum	Bulb	7.0	27.0	1.0	*
Allium cepa	Leaf	--	--		Das, V. S. R., Rao, J. V. S. 1964. Phenolic Acids of Onion Plant. Curr. Sci., 33(15): 471-472.
Althaea officinalis	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
Althaea officinalis	Leaf	--	--		*
Althaea officinalis	Flower	--	--		*
Althaea officinalis	Root	--	--		*
Ananas comosus	Plant	200.0	760.0	0.3	*
Anethum graveolens	Fruit	--	--		*
Anethum graveolens	Seed	--	--		*
Angelica sinensis	Plant	--	940.0	0.7	Jim Duke's personal files.
Angelica sinensis	Root	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Apium graveolens	Root	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Arachis hypogaea	Seed	--	45.0	-0.37	*

uva-ursi					
Artemisia dracunculus	Leaf	--	38.0	2.44	*
Aspalathus linearis	Shoot	--	0.66		*
Astragalus membranaceus	Root	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Avena sativa	Seed	--	--		*
Ballota nigra	Plant	--	--		*
Basella alba	Plant	--	--		*
Beta vulgaris	Leaf	--	--		*
Brassica pekinensis	Leaf	--	6.0	-0.57	*
Brassica oleracea var. italica	Leaf	--	13.0	0.09	*
Brassica oleracea var. botrytis l.	Leaf	--	13.0	0.09	*
Brassica oleracea var. capitata l.	Leaf	4.0	20.0	0.75	*
Brassica nigra	Seed	--	--		Jim Duke's personal files.
Brassica oleracea var. gemmifera	Leaf	--	10.0	-0.19	*
Capsicum frutescens	Fruit	--	--		*
Catalpa ovata	Wood	--	--		*
Celosia cristata	Flower	--	--		*
Centaurea cyanus	Flower	--	--		Jim Duke's personal files.
Centaurium erythraea	Plant	--	--		*
Ceratonia siliqua	Fruit	--	--		Wealth of India.
Chamaemelum nobile	Plant	--	--		*
Chenopodium album	Fruit	--	--		*
Chenopodium ambrosioides	Fruit	--	--		*
Cichorium intybus	Leaf	--	0.5	-1.08	*
Cichorium intybus	Plant	--	--		*
Cimicifuga dahurica	Rhizome	--	--		*
Citrullus colocynthis	Fruit	--	--		*
Citrus sinensis	Fruit	10.0	30.0	-0.76	*
Citrus reticulata	Pericarp	--	--		*
Citrus sinensis	Pericarp	20.0	180.0	1.0	*
Citrus sinensis	Fruit Juice	--	--		Jim Duke's personal files.
Citrus limon	Fruit	14.0	40.0	-0.38	*
Citrus paradisi	Pericarp	25.0	160.0	-1.0	*
Citrus paradisi	Fruit	25.0	35.0	-0.57	*
Cnicus benedictus	Shoot	--	--		Jim Duke's personal files.
Cnicus benedictus	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Cocos nucifera	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Coix lacryma-jobi	Pericarp	--	--		*
Commiphora wightii	Resin, Exudate, Sap	--	--		Jim Duke's personal files.

majalis					
<i>Coptis japonica</i>	Rhizome	--	--		*
<i>Coptis chinensis</i>	Rhizome	--	--		*
<i>Coptis</i> spp	Rhizome	--	--		*
<i>Coriandrum sativum</i>	Plant	--	11.0	-1.38	*
<i>Cucumis sativus</i>	Fruit	--	--		*
<i>Cucumis melo</i>	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
<i>Cucurbita pepo</i>	Plant	--	--		*
<i>Cydonia oblonga</i>	Fruit	--	--		*
<i>Cynara cardunculus</i>	Plant	--	--		*
<i>Datura stramonium</i>	Plant	--	--		*
<i>Daucus carota</i>	Root	--	--		*
<i>Digitalis purpurea</i>	Leaf	--	--		*
<i>Dioscorea alata</i>	Plant	--	--		*
<i>Dipteryx odorata</i>	Leaf	--	--		Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
<i>Echinacea</i> spp	Plant	--	--		*
<i>Elaeagnus angustifolia</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Eleutherococcus senticosus</i>	Root	--	--		*
<i>Equisetum hyemale</i>	Plant	--	--		*
<i>Equisetum arvense</i>	Plant	--	--		*
<i>Eucalyptus globulus</i>	Leaf	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
<i>Eucalyptus citriodora</i>	Leaf	--	--		*
<i>Euphorbia latyrhis</i>	Leaf	--	--		*
<i>Euphorbia hirta</i>	Leaf	--	--		*
<i>Euphrasia officinalis</i>	Plant	--	--		Tyler, V.E.. 1982. The Honest Herbal. George F. Stickley Co., Philadelphia PA. 263 pp.
<i>Ferula assa-foetida</i>	Gum	--	--		*
<i>Ferula assa-foetida</i>	Essential Oil	--	--		*
<i>Ferula assa-foetida</i>	Resin, Exudate, Sap	--	13000.0		*
<i>Ficus carica</i>	Plant	--	--		*
<i>Foeniculum vulgare</i>	Fruit	--	--		*
<i>Foeniculum vulgare</i>	Seed	--	0.5	-0.43	*
<i>Gaultheria procumbens</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Glechoma hederacea</i>	Plant	--	--		*
<i>Glycine max</i>	Plant	1.0	4.0	-1.39	*
<i>Glycine max</i>	Shoot	--	--		*
<i>Glycine max</i>	Seed	1.0	4.0	-0.43	*
<i>Glycyrrhiza glabra</i>	Plant	--	--		*
<i>Helianthus annuus</i>	Pollen Or Spore	2.0	3.0		*
<i>Hierochloe odorata</i>	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

					Verlag, Berlin, 1969-1979.
<i>Humulus lupulus</i>	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Huperzia</i> spp	Plant	--	--		*
<i>Hura crepitans</i>	Leaf	--	--		*
<i>Hypericum perforatum</i>	Plant	--	--		*
<i>Hyssopus officinalis</i>	Plant	--	--		Jim Duke's personal files.
<i>Juglans nigra</i>	Seed	--	--		*
<i>Juglans regia</i>	Testa	10.0	65.0		*
<i>Juglans regia</i>	Seed	0.4	1.0	-0.43	*
<i>Juniperus communis</i>	Leaf	--	--		*
<i>Kalanchoe pinnata</i>	Plant	--	--		*
<i>Lactuca sativa</i>	Plant	--	--		*
<i>Lens culinaris</i>	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
<i>Levisticum officinale</i>	Fruit	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
<i>Ligustrum japonicum</i>	Flower	--	--		*
<i>Linum usitatissimum</i>	Seed	--	--		*
<i>Lycopersicon esculentum</i>	Fruit	--	--		*
<i>Lycopodium selago</i>	Plant	--	--		*
<i>Lycopodium clavatum</i>	Plant	--	--		*
<i>Lycopus europeus</i>	Plant	--	--		Jim Duke's personal files.
<i>Malus domestica</i>	Fruit	4.0	95.0	1.72	*
<i>Medicago sativa</i>	Leaf	--	--		*
<i>Medicago sativa</i>	Tissue Culture	--	--		*
<i>Melia azedarach</i>	Plant	--	--		*
<i>Melilotus officinalis</i>	Plant	--	--		Pharmazie, 46: 156, 1991.
<i>Melilotus officinalis</i>	Shoot	--	--		*
<i>Mentha x rotundifolia</i>	Shoot	--	--		Jim Duke's personal files.
<i>Menyanthes trifoliata</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Myroxylon balsamum</i>	Plant	--	--		*
<i>Nicotiana tabacum</i>	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Oenothera biennis</i>	Plant	--	--		*
<i>Ononis spinosa</i>	Root	--	--		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
<i>Opopanax chironium</i>	Resin, Exudate, Sap	--	--		*
<i>Oryza sativa</i>	Plant	--	--		*
<i>Panax ginseng</i>	Root	--	--		*
<i>Panax quinquefolius</i>	Plant	--	--		*
<i>Papaver somniferum</i>	Pericarp	--	--		*

vulgaris					
<i>Pinus sylvestris</i>	Bark	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Pisum sativum</i>	Seed	--	--		*
<i>Plantago major</i>	Plant	--	--		*
<i>Polygala senega</i>	Root	--	--		*
<i>Portulaca oleracea</i>	Plant	--	--		*
<i>Prunus dulcis</i>	Plant	--	--		*
<i>Prunus spinosa</i>	Plant	--	--		*
<i>Prunus domestica</i>	Fruit	--	--		Jim Duke's personal files.
<i>Prunus cerasus</i>	Plant	--	--		*
<i>Prunus persica</i>	Plant	--	--		*
<i>Pteridium aquilinum</i>	Plant	--	--		*
<i>Punica granatum</i>	Fruit	--	--		Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
<i>Raphanus sativus</i>	Root	--	16.0		*
<i>Rheum rhabarbarum</i>	Pt	--	8.0		*
<i>Rheum officinale</i>	Root	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
<i>Rheum rhabarbarum</i>	Root	--	--		*
<i>Ribes uva-crispa</i>	Fruit	--	--		*
<i>Ribes nigrum</i>	Fruit	--	--		*
<i>Ricinus communis</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Rosa canina</i>	Tissue Culture	--	--		*
<i>Rosa canina</i>	Stem	--	--		*
<i>Rubus idaeus</i>	Plant	--	--		*
<i>Rubus idaeus</i>	Fruit	--	--		*
<i>Rubus fruticosus</i>	Fruit	--	--		*
<i>Salvia officinalis</i>	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
<i>Salvia sp.</i>	Seed	--	2136.0	2.45	Phenolic Compounds in Food and Their Effects on Health, 67.
<i>Sambucus nigra</i>	Plant	--	--		*
<i>Serenoa repens</i>	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Sesamum indicum</i>	Leaf	--	--		*
<i>Sesamum indicum</i>	Fruit	--	--		*
<i>Solanum melongena</i>	Root	--	--		*
<i>Solanum tuberosum</i>	Tuber	13.0	225.0		*
<i>Solidago gigantea</i>	Plant	--	1040.0	0.93	*
<i>Sophora japonica</i>	Plant	--	--		*
<i>Spinacia oleracea</i>	Leaf	--	16.0	0.37	*
<i>Spinacia oleracea</i>	Inflorescence	--	--		*
<i>Stellaria media</i>	Shoot	--	--		*
<i>Taraxacum officinale</i>	Flower	--	--		*
<i>Taxus baccata</i>	Leaf	0.1	3.5	-0.8	*
<i>Tecoma stans</i>	Plant	--	--		*
<i>Theobroma cacao</i>	Seed	--	--		*

Species Name	Part	1948-1976	1977-1980	1981-1985	Notes
<i>Triticum aestivum</i>	Seed	15.0	32.0	-0.39	*
<i>Urtica dioica</i>	Plant	--	--		*
<i>Vaccinium macrocarpon</i>	Fruit	--	--		*
<i>Vaccinium myrtillus</i>	Leaf	--	--		*
<i>Vaccinium myrtillus</i>	Fruit Juice	--	--		*
<i>Vaccinium myrtillus</i>	Fruit	--	--		*
<i>Vaccinium corymbosum</i>	Plant	--	--		*
<i>Vanilla planifolia</i>	Root	--	--		*
<i>Vicia faba</i>	Plant	--	--		*
<i>Viola odorata</i>	Plant	--	--		*
<i>Vitis vinifera</i>	Fruit	--	--		*
<i>Zea mays</i>	Leaf	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
<i>Zea mays</i>	Sprout Seedling	--	--		*
<i>Zea mays</i>	Seed	6.0	27.0	-0.4	*
<i>Zingiber officinale</i>	Plant	--	--		Stitt, Paul. Why George should eat broccoli.